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MEETING ABSTRACT Open Access

Serum total IgE, ascaris lumbricoides specific IgE and eosinophils in parasites-infected children in a tropical area

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Background
This study investigated the relationship between total IgE and *Ascaris lumbricoides* specific IgE and eosinophils in children from endemic areas to assess the Th2-type immune response in a population that comprised 205 children with aged 1-10 years, and of low socioeconomic status.

Methods
Fecal samples were analysed by the methods of Blagg and Kato-katz. The serum levels of total IgE and *A. lumbricoides* specific IgE were determinated by ImmunoCAP (Pharmacia) and the eosinophils were counted in peripheral blood.

Results
The results showed a prevalence of 89% (182) for intestinal parasites. *A. lumbricoides* was detected in 140 (68%) children. The levels of total and specific IgE and eosinophils presented values above those of standard reference (median 480 KU/L and 0,74 KUA/L and 8%, respectively). Total IgE, *A. lumbricoides* specific IgE and eosinophils were significantly higher in the *A. lumbricoides* positive children as compared to *A. lumbricoides* negative ones (p = 0.02, <0.01 and 0.03).

Conclusions
Our results showed that parasites intestinal infection, particularly *A. lumbricoides*, induced a Th2-type immune response with production of the total and specific IgE and eosinophils.

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